

Perthes' Disease

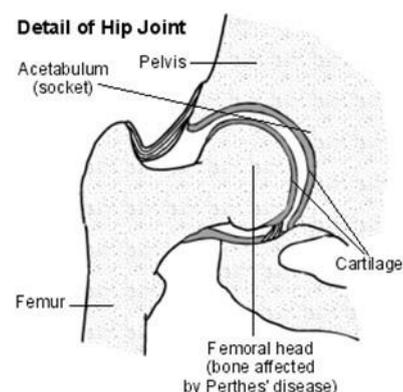
Paediatric Management Advice Leaflet

What is Perthes' Disease?

Perthes' disease occurs in a part of the hip joint called the femoral head, which sits inside the hip socket (acetabulum). It occurs due to a loss of the blood supply to the femoral head. As a result, the bone cells in the affected area die, the bone softens and can fracture or become distorted. The amount of bone damage can vary from mild to severe.

The exact cause of the blood vessel problem that occurs in the first place is not known. A child with Perthes' disease is usually otherwise well.

Over several months the blood vessels regrow, and the blood supply returns to the bone tissue. New bone tissue is then made so the femoral head reforms and regrows. This is similar to how bone reforms and regrows after any normal fracture or break to a bone. However, with Perthes' disease it takes longer.



Who does it affect?

- Usually children who are aged between 4 and 12 years
- Boys are four times more likely to be affected than girls
- Each year, about 1 in 10,000 children are affected
- It usually only affects one hip, but both hips are affected in about 1 in 7 children

Will my child need treatment?

In many cases, the top of the thigh bone in the hip joint regrows and remodels back to normal, or near-normal. The hip joint then returns to normal and is able to work as usual. However, this can take two or more years after the condition first starts. Even after this time, there may be some stiffness remaining in the hip and there is an increased risk of arthritis in later life. The aim of treatment is to promote this healing process and ensure the hip joint heals and regrows in the correct position.

Will my child need surgery?

Orthopaedic surgeons tend to recommend an observation approach for young children (under 6 years old) with mild disease, as it will usually heal well without a specific treatment. X-rays are taken to monitor the hip joint. Surgery may be considered to improve the shape and function of the hip joint, if it has not healed well.

What are the symptoms of Perthes' Disease?

The symptoms usually develop gradually over a period of time. The first indication that a child may have Perthes' disease is when they develop a limp. The affected hip is often but not always painful. The symptoms may include:

- **Pain** can be felt in the affected hip and also in the groin. Referred pain can also sometimes be felt in the thigh and knee.
- **Limb shortening** may occur in the affected side compared to the unaffected side.
- **Limping** is often developed and can gradually become worse over a few weeks.
- **Stiffness and reduced range of movement** occurs in the affected hip as the hip becomes more damaged. Hip flexion and abduction are the movements most affected.
- **Muscle wasting** occurs as the affected leg can't be used normally and the muscle becomes weaker. You may notice that the affected leg appears thinner than the unaffected leg.

What can help?

- **Swimming and cycling** are recommended as this keeps the joint mobile without putting pressure through the joint.
- **Pain relief** medication may reduce pain, but you need to discuss options with a pharmacist or GP.
- **Avoiding** activities that lead to direct impact through the joint e.g. running, trampolines.

Exercise

Exercise is recommended to promote joint mobility and maintain strength. A physiotherapist can guide you through the correct exercises to complete. Please see some below to start on. Start with 3 repetitions of each and gradually increase by 1 or 2 each day up to 15. Try to exercise at least 3 times a day.

Stop these exercises if you feel they are making your symptoms worse or bring on new pain. Please contact the Physiotherapy department for more advice on the number below.

Hip Flexion Stretch



Lying on your back. Bend the leg to be stretched towards your chest and hold onto the knee with both arms. Pull your knee towards your chin keeping your head on the floor. Hold for 20 seconds. Repeat on each leg.

Adductor Stretch

Lying on your back with your knees bent and feet on the floor. Place the soles of your feet together and open your knees. Gently let your knees lower towards the floor. Hold for 20 seconds. Slowly return to the starting position.



Bridge



Lying on your back with your knees bent and feet on the floor. Lift your pelvis and lower back gradually off the floor. Hold for 5-10 seconds. Slowly return to the starting position.

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